

WHAT IS CLAIMED IS:

Sub
1. A magneto-optical recording medium comprising:
a magnetic recording layer for recording information;
and

a magnetic reproducing layer provided on said magnetic
recording layer for reading information;

said magnetic reproducing layer comprising at least one
first reproducing layer having a first composition and at least
one second reproducing layer having a second composition
slightly different from said first composition, said first
and second reproducing layers having the same principal
ingredients.

2. A magneto-optical recording medium according to
claim 1, further comprising a magnetic intermediate layer
provided between said magnetic recording layer and said
magnetic reproducing layer.

3. A magneto-optical recording medium according to
claim 1, further comprising a nonmagnetic intermediate layer
provided between said magnetic recording layer and said
magnetic reproducing layer.

4. A magneto-optical recording medium according to
claim 1, wherein said magnetic reproducing layer contains Gd,
the difference in Gd composition between said first
reproducing layer and said second reproducing layer being in

the range of 0.5 to 3.0 at%.

5. A magneto-optical recording medium according to claim 4, wherein the difference in said Gd composition is in the range of 0.7 to 2.0 at%.

6. A magneto-optical recording medium according to claim 4, wherein said magnetic reproducing layer is composed of GdFeCo.

7. A magneto-optical recording medium according to claim 6, wherein said Gd composition is in the range of 24.0 to 27.0 at%.

8. A magneto-optical recording medium according to claim 1, wherein the total thickness of said first reproducing layer and said second reproducing layer is in the range of 35 to 60 nm.

9. A magneto-optical recording medium according to claim 8, wherein the total thickness of said first reproducing layer and said second reproducing layer is in the range of 40 to 50 nm.

10. A manufacturing method for a magneto-optical recording medium, comprising the steps of:

forming a first magnetic reproducing layer having a first composition by sputtering;

forming a second magnetic reproducing layer having a second composition slightly different from said first

composition on said first magnetic reproducing layer by sputtering, said first and second magnetic reproducing layers having the same principal ingredients; and

forming a magnetic recording layer on said second magnetic reproducing layer by sputtering;

wherein variations in composition of said first and second magnetic reproducing layers are corrected by changing a ratio in film thickness between said first and second reproducing layers.

11. A manufacturing method for a magneto-optical recording medium according to claim 10, wherein said first magnetic reproducing layer, said second magnetic reproducing layer, and said magnetic recording layer are formed by using a stationary opposed type sputtering device.

12. A manufacturing method for a magneto-optical recording medium according to claim 10, wherein each of said first and second magnetic reproducing layers is composed of GdFeCo, the composition of Gd contained in each of said first and second magnetic reproducing layers being in the range of 24.0 to 27.0 at%.

13. A manufacturing method for a magneto-optical recording medium according to claim 12, wherein the difference in said Gd composition between said first magnetic reproducing layer and said second magnetic reproducing layer is in the

range of 0.5 to 3.0 at%.

14. An information recording medium comprising:

at least one first recording layer having a first composition; and

at least one second recording layer having the same principal ingredients as those of said first recording layer and a second composition slightly different from said first composition.

09604 04000